

Amendments to the Specification:

Please replace the paragraph starting on page 48, line 5 with the following amended paragraph:

-- Furthermore, the nucleotide sequence of siRNAs may be designed using a siRNA design computer program available from the Ambion website (http://www.foundontheWorldWideWebatambion.com/techlib/misc/siRNA_finder.html). The nucleotide sequences for the siRNA are selected by the computer program based on the following protocol: --

Please replace the paragraph starting on page 55, line 32 with the following amended paragraph:

-- The region [A] hybridizes to [A'], and then a loop consisting of region [B] is formed. The loop sequence can be selected from those ~~describe~~ described in http://www.foundontheWorldWideWebatambion.com/techlib/tb/tb_506.html, or those described in *Jacque, J.-M. et al., Nature* 418: 435-438 (2002). Additional examples of the loop sequence that can be included in the present double-stranded molecules include: --

Please replace the paragraph starting on page 66, line 20 with the following amended paragraph:

-- *In vitro* transcription of linearized plasmids carrying the full-length cDNA sequence of an KOC1-associated gene, *RAB35*, was performed using DAVIS Lab's protocol (<http://www.foundontheWorldWideWebated.ac.uk/~ilan>). To generate fluorescent riboprobes for *in vivo* co-localization with KOC1, the plasmids were transcribed using the mCAP RNA capping kit (Stratagene) in the presence of Alexa Fluor 546-labeled UTP (Molecular Probes). We constructed plasmids expressing EGFP-fused KOC1 (EGFP-KOC1) protein were prepared using pEGFP-N1 vectors (BD Biosciences Clontech). For live-cell imaging of co-localized EGFP-KOC1 and Alexa Fluor 546-labeled *RAB35* mRNA, COS-7 cells that had been transfected initially with pEGFP-*KOC1* were additionally transfected 36 hours later with Alexa Fluor 546-labeled *RAB35* mRNA (3 μ g per 3.5-cm culture dish) in the presence of RNase Inhibitor (TAKARA). The plasmid-DNA and RNA samples were transfected using Lipofectamine 2000

(Invitrogen) according to the manufacturer's protocols. The cells were washed twice with PBS, and fresh medium was added 90 min after transfection with the labeled mRNA. The cells were allowed to recover in the incubator (37°C, 5% CO₂) for 30 min before live-cell imaging for 3-6 hours with a confocal microscope (FV1000 FLUOVIEW, OLYMPUS). To investigate the specific transport of mRNAs by KOC1-RNP complex from one cell to another cell, we prepared two different COS-7-derived cells; the COS-7 cells transfected with pEGFP-*KOC1* and Alexa Fluor 546-labeled *RAB35* mRNA and the other, parental COS-7 cells simply labeled with CellTracker (Molecular Probes) according to the supplier's protocols. These two cell populations were mixed and co-cultured for 12 hours before live-cell imaging with confocal microscope for 6 hours. --